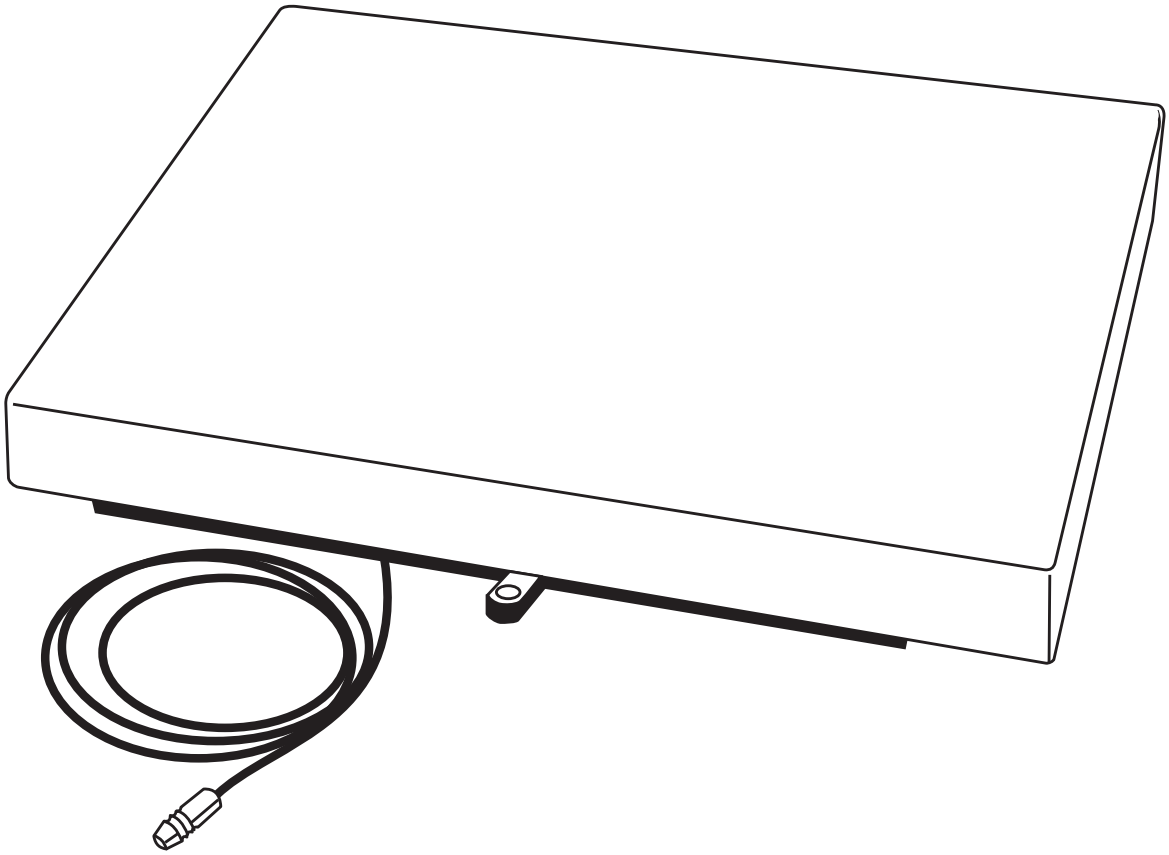
Sartorius
IS 150 IGG-H, IS 150 IGG-H0CE
IS 300 IGG-H, IS 300IGG-H0CE

Weighing Platforms
Installation and Operating Instructions



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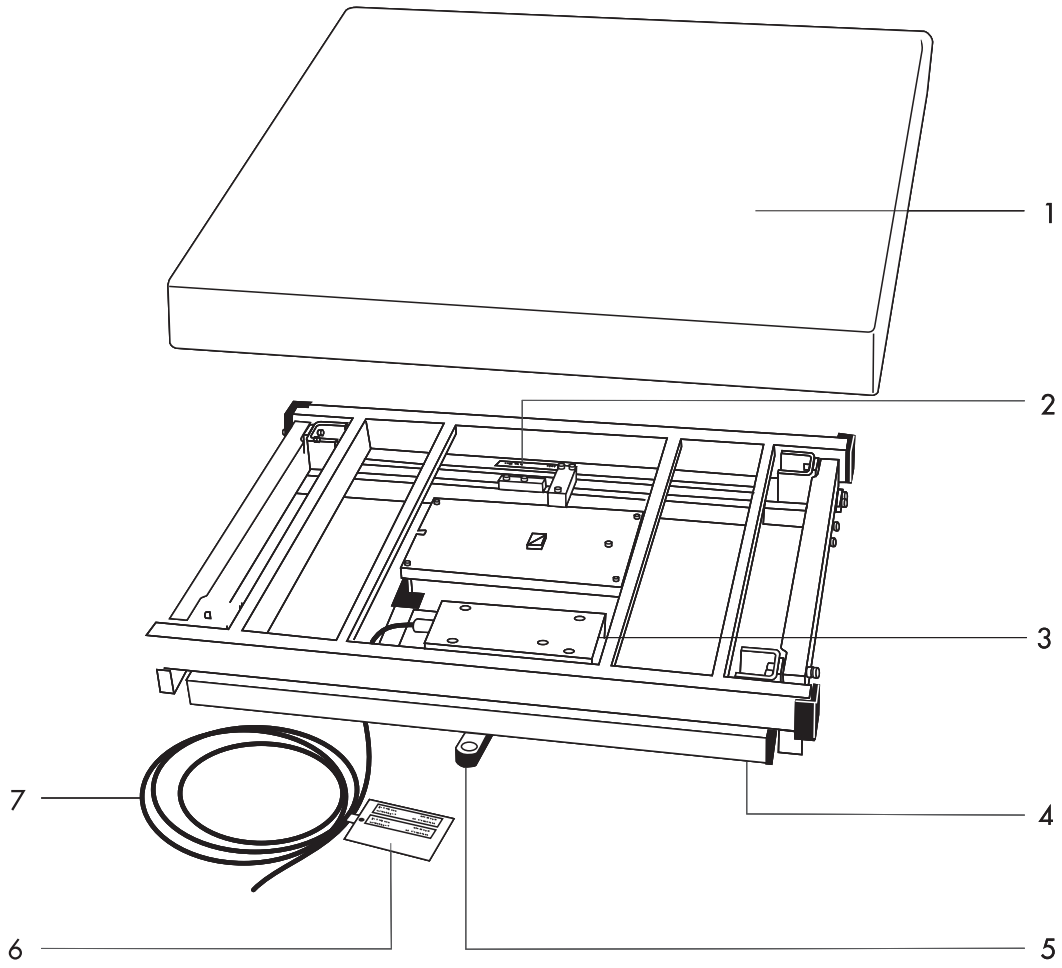
General View of the Weighing Platform



No. Designation

1 Load plate
2 Manufacturer's label
3 Line voltage connector (optional)
4 Leveling feet
5 Level indicator
6 Tag plate for metrological ID label
7 Connecting cable
(interface port/power supply)

With this Sartorius IS weighing platform, you have acquired a high-quality weighing instrument that features advanced technology. As a rule, you will be using this weighing platform as part of a modular weighing system.

Please read through these installation and operating instructions before operating your new weighing platform.

Warranty

Do not miss out on the benefits of our full warranty. Please complete the warranty registration card, indicating the date of installation, and return the card to your Sartorius dealer or office.

Storage and Shipping Conditions

Allowable storage temperature: – 10°C ... + 40°C
– 14°F ... + 104°F

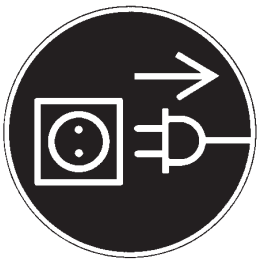
Allowable storage humidity: 98% relative humidity at 40°C (104°F)

After unpacking the weighing platform, please check it immediately for any visible damage. If you detect any damage, proceed as directed in the section entitled "Safety Inspection."

It is a good idea to save the box and all parts of the packaging until you have successfully installed the weighing platform. If you need to ship the weighing platform for any reason, be sure to unplug all connected cables to prevent damage.

Safety Instructions

The seals affixed to this equipment indicate that only authorized service technicians are allowed to open the equipment and perform maintenance work so that safe and trouble-free operation of the equipment is ensured and the warranty remains in effect.



Before opening the weighing cell or A/D converter enclosure, make sure to unplug the weighing platform from the power supply!

Instructions for Use in Hazardous Areas

Weighing platforms of the series ISI 150IGG-H...and IS300IGG-H comply with the European Standards EN 50 021: 1999 and EN 5028-1-1-1 according to the Statement of Conformity, No. TüV 01 ATEX 1739 X, including the 1st and 2nd Supplements (see "TÜV Certificates"). Therefore, they are suitable for use in Zones 2 and 22 hazardous areas. Their approval marking is:

⟨Ex⟩ II 3 GD IP67 Eex nR II T6 T80°C

The type of explosion protection used in these weighing platforms involves protection of the housing against penetration of potentially explosive vapor. For this purpose, IP67 protection of the platform must be ensured when it is connected to the power source. Opening the platform or disconnecting cables while the scale is plugged into the power supply is strictly forbidden. Please read the installation instructions in the Annex 35751-000-16-A4. To install the power supply, please follow the installation instructions given in the section entitled "Connecting the Weighing Platform" in "Getting Started."

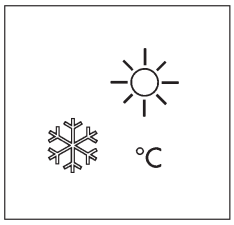
If you will be operating the platform outside the European Community in a Zone 2 hazardous area, you must comply with the national electrical code and applicable safety regulations of your country. Please ask your local Sartorius service technician, office or dealer for information on the currently valid regulations applicable in your country.

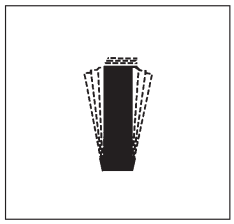
The weighing platform may not be operated in Zone 0, 1, 20 or 21 hazardous areas, as it does not have an EX approval certificate for these areas.

Any tampering with the weighing platform by anyone, other than installation of preload devices, will result in forfeiture of all claims under the manufacturer's warranty.

Installation Instructions

Sartorius dealers or service technicians, who have received special training, will help you set up the weighing platform and show you how to operate it.





Ambient Conditions

Choose a suitable place to set up the weighing platform. Avoid exposing the weighing platform to the following ambient conditions:

– Extreme heat radiation

– Extreme vibration

– Places that are difficult to access for cleaning and maintenance

Important Note
If you need to use the weighing platform in areas exposed to heavy traffic (e.g., fork-lift trucks), you should install a protective frame, consisting of angular braces, around the weighing platform. To calculate the dimensions for this protective frame, refer to the section entitled "Dimensions (Scale Drawings)."

Conditioning the Weighing Platform

Do not expose the weighing platform to extreme moisture over long periods. Moisture in the air can condense on the surfaces of a cold platform whenever it is brought to a substantially warmer place. If you transfer the weighing platform to a warmer area, make sure to condition it for about 2 hours at the new ambient temperature, leaving it unplugged from the power supply. Afterwards, if you keep the weighing platform connected to the power supply, the continuous positive difference between the inside of the platform and the outside will practically rule out the effects of moisture condensation.

IP67 Protection

In conformance with the IP67 protection rating, the weighing platform will remain leaktight for 30 minutes if immersed at a depth of 1 meter (approx. 3 ft.).

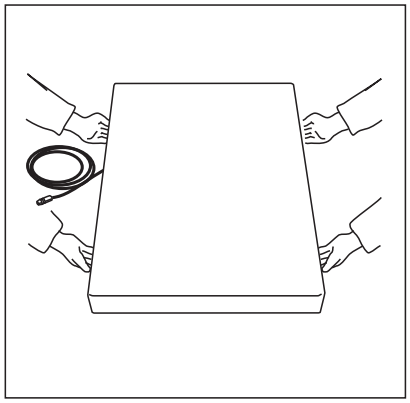
The IP67 protection of the weighing platform is ensured only under the following conditions:

– The weighing platform is maintained in the original factory condition
– The rubber seals of the weighing cell and the A/D converter are not perforated
– All cables are securely fastened in place by cable glands
– Both the weighing cell and the A/D converter enclosure are securely closed

Getting Started

Unpacking the Weighing Platform

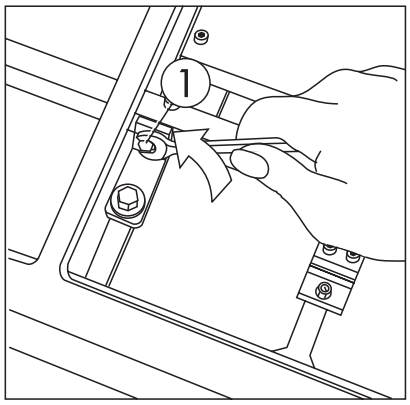
Important Note
To install the weighing platform in a pit, please observe the special requirements given in the section "Pit Installation."



Unpacking the Weighing Platform

- Remove the weighing platform and the load plate from the packaging
- To transport the weighing platform, lift it on both long sides
- Remove the plastic bags, packaging strips and foam material

Removing the Transport Locking Devices



Set up the weighing platform in the vicinity of your work area and remove the load plate.

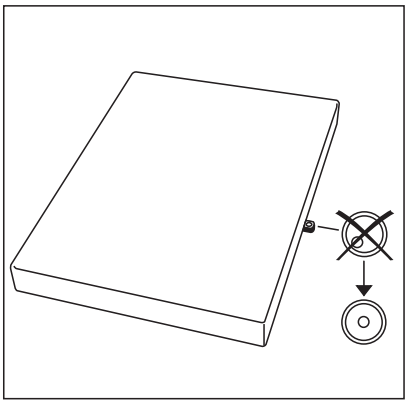
Proceed as follows with the red color-coded transport locking device:

- Remove screw 1

- Loosen screw 2 and turn the angular brace by 180°, refasten screw 2
- Refasten screw 1 to the lever

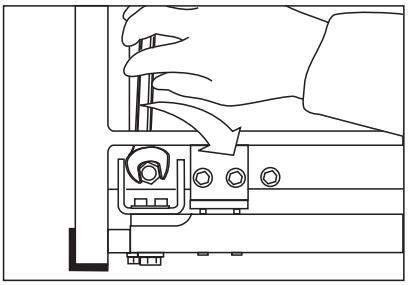
Important Note on Transporting the Weighing Platform

Follow the above instructions in reverse order to the transporting locking device when transporting the weighing platform.

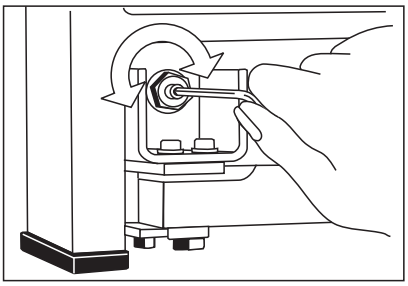


Leveling the Weighing Platform Using the Level Indicator

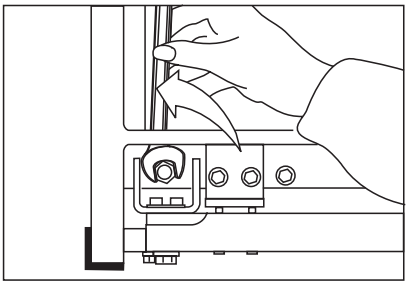
At the place of installation, level the weighing platform using the leveling feet so that the air bubble is centered within the circle of the level indicator. Check to ensure that all 4 leveling feet securely touch the surface and that they equally support the weight of the platform.



– Remove the load plate
– Loosen the locknuts on the leveling feet using a 17 mm open-end wrench (spanner)



– Extend or retract the leveling feet using a 5 mm Allen wrench (key)



– After leveling the weighing platform, refasten the locknuts securely against the platform frame

– Replace the load plate

Connecting the Weighing Platform

Before initially operating the scale, connect the following cables and completely assemble the components listed below:
- interface cable to a Sartorius *isi* industrial terminal or a computer with special software
- separate power cable for power supply via a Sartorius AC adapter
- components for conveyor systems

Make absolutely sure to unplug the weighing platform from the power supply before you connect or disconnect any interface cables.

Please note that the person or company who connects any non-Sartorius-approved indicating and control devices (e.g., a computer) or power supplies to the weighing platform shall assume all risks and responsibilities associated with this equipment.

Plug the connecting cable into the connector of a Sartorius *isi* industrial terminal. Afterwards, hand-tighten the locking ring. The connecting cable is 6 meters long (approx. 20 feet). To order an extension cable or to customize a cable to your requirements, refer to the list of accessories or contact Sartorius.

Cable Lengths:
Since you can choose to power the weighing platform via the interface port of the Sartorius *isi* industrial terminal or a separate power supply unit, there are a few restrictions that apply to the cable lengths between these components.
If you use a cable that is longer than 12 meters (~ 40 feet) between the weighing platform and the Sartorius isi industrial terminal, each of these components must be energized by a separate AC adapter.

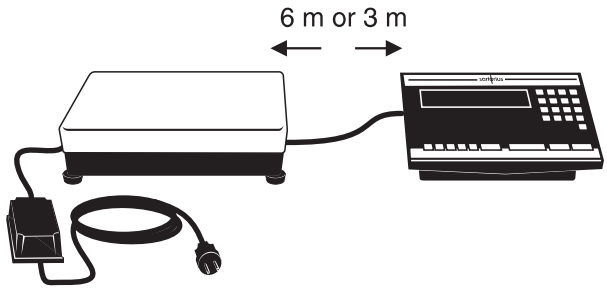
Note on use in a Zone 11 hazardous area:
The industrial terminal must be mounted securely on a vertical surface so that the connecting jacks face downwards.

Separate Power Connection for the Weighing Platform

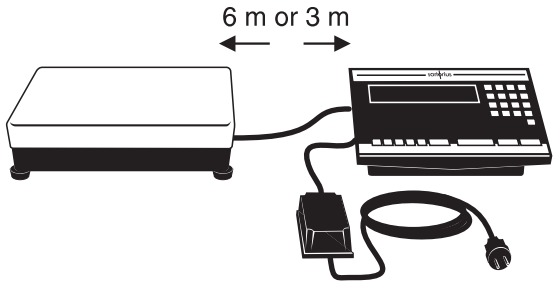
Have your local Sartorius dealer or service technician connect the weighing platform separately to line current (mains supply). This separate power connection is required when you use cables that are longer than 12 meters or if you interface the weighing platform directly with a computer.

The following diagrams show the options for powering weighing platforms and industrial terminals.

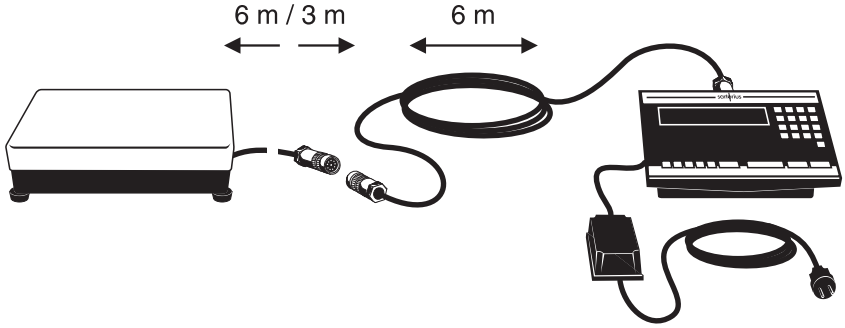
Cables for connecting the industrial-grade AC adapter, model ING2, to the "IS" weighing platform without an extension cord (using the YDO50IS (3m) or YDO53IS (6m) data output port):



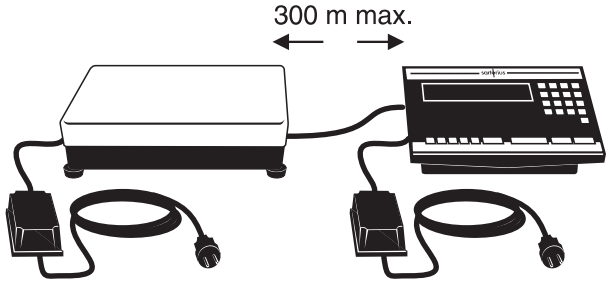
Cables for connecting the industrial-grade AC adapter, model ING2, to the *isi* industrial terminal without an extension cord (using the YD050IS (3 m) or the YD053IS (6 m) data output port):



Cables for connecting the industrial-grade AC adapter, model ING2, only to the *isi* industrial terminal with an extension cord:



Connections for cables longer than 12 meters:



Safety Precautions

The weighing platform is energized by an external industrial-grade AC adapter. Make sure that the voltage rating printed on this unit is identical to your local line voltage. If the voltage specified on the label or the plug design does not match the rating or standard you use, please contact your local Sartorius dealer or office. To use a main feeder cable from the ceiling or to mount a CEE plug, you will have to make arrangements inside your facilities for installation of such cable equipment.

Use only original Sartorius AC adapters/power supplies identified by the Sartorius label. Use of AC adapters/power supplies from other manufacturers, even if these units have an approval identification marking from a national testing laboratory, requires the consent of an authorized Sartorius service technician.

For detailed information on further options for powering the weighing platform (e.g., using local low voltage), contact Sartorius headquarters in Germany or one of the main offices based in your country.

Hook up the weighing platform to the power supply in conformance with the installation requirements of your country.

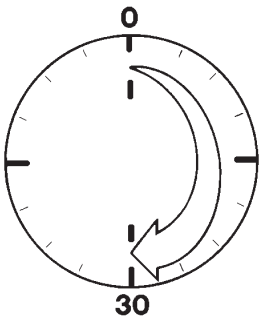
Safety Precautions:
A power supply rated to Industrial Class 2 can be plugged into any electrical outlet without requiring any additional safety precautions. The ground or earth terminal is connected to the platform housing, which can be additionally grounded/earthed, if required.
Install the power cable for connection to an isi industrial terminal or a computer with adequate protection so that the cable cannot get damaged.

Fixed Power Connection:
If the power cable is permanently installed or secured so that it cannot be unplugged, the weighing platform must be able to be switched off by a suitable emergency switch. This emergency switch must be installed near the weighing platform and be within easy reach. In addition, this switch must be labeled as an emergency switch. All operators must be shown how to operate this switch.
Operating the Weighing Platform in Zone 2 Hazardous Areas:
If you need to install the platform in Zone 2 hazardous areas, make sure to comply with the applicable requirements of your country. Installation of equipment in Zone 2 must be done by a certified technician.The female plug of the power cable on the industrial-grade power supply must be secured to the display unit of the weighing platform. The following requirements must be met for the plug on the other end of the cable:
– either an explosion-protected plug must be installed;

– or the plug must be detached from the power cable and the power cable permanently secured to a suitable junction box;.
– or the plug must be secured against accidental disconnection (see Installation Instructions 35751-000-16 AN in this manual).

Connection to the Power Supply in a Zone 2 Hazardous Area:
Brown (live (L))
Blue (neutral (N))
Yellow/green (protective grounding conductor/protective earth)

Whenever possible, avoid wiring your weighing platform into networks that carry a heavy electrical load (for instance, a compressor or similar equipment).



Warm-up Time

The weighing platform will need to warm up for at least 30 minutes after initial connection to the power supply (or after a relatively long period without power connection).

Preparing the Weighing Platform for Verification as a Legal Measuring Instrument in the EU*:

After initially connecting the weighing platform to the power supply, (or after a relatively long period outage), allow the platform to warm up for at least 24 hours.

*including the Signatories of the Agreement on the European Economic Area

Operating Limits

Maximum Overload Capacity

Sartorius weighing platforms are built so that occasionally loading them beyond their maximum weighing capacity will not damage them in any way.

The maximum overload capacity of this IS model is ***600 kg***.

Shock Resistance

Even though Sartorius weighing platforms feature a highly rugged construction, there are some limits. Avoid dropping objects from considerable height on the weighing platform and do not expose it to strong side impact. Sartorius weighing platforms withstand shock according to the shock response spectrum defined in the IEC68 standard.

General Instructions for Integration into Conveyor Systems

The IS weighing platform is suitable for installation in conveyor systems. Follow the general instructions given below and refer to the "Dimensions (Scale Drawings)" to meet the requirements for such installation. Secure the weighing platform using the appropriate components from the set of fasteners, YAS04 IS.

Any moving or rotating parts intended to be permanently attached to the load plate must be designed so that they cannot affect the weighing results. Rotating mechanisms must be properly balanced, for example. In addition, take care that the fittings do not collide with the parts of the scale platform mechanism under the load plate. Make sure to remove the load plate from the platform before drilling.

Any cables or tubing between the weighing platform and other equipment must not apply any force to the weighing platform. Make sure that cables do not touch the load plate.

If you install the weighing platform in conveyor systems in Zone 2 or 22 hazardous areas, you must comply with the applicable safety regulations (e.g., in Germany with VDE0165). Special precautions must be taken to prevent the build-up of static electricity caused by moving parts (e.g., roller conve s).

Preload Range (Zero-Setting Range)

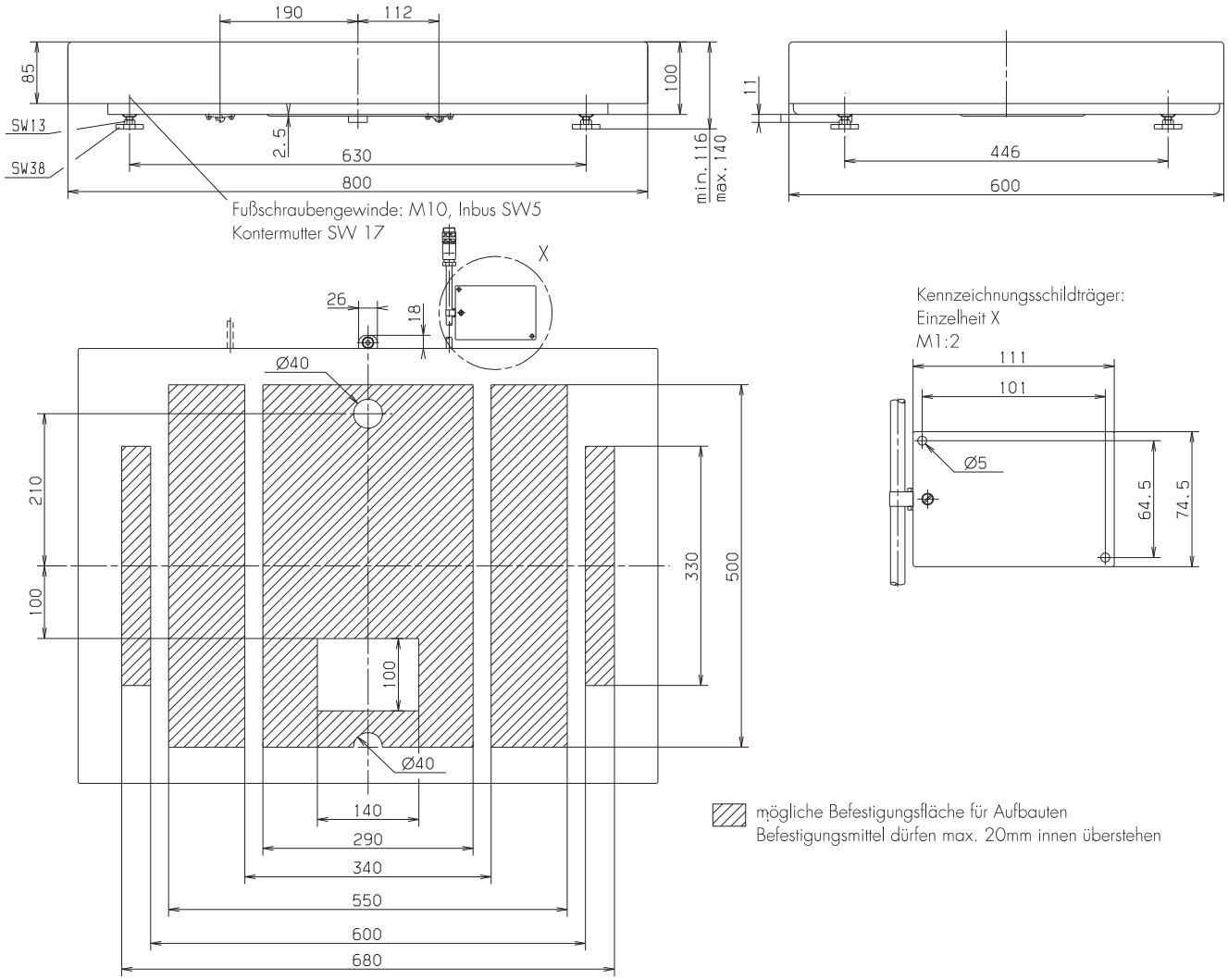
The weight of components that are securely installed on the weighing platform is called "preload." The weighing platform must electrically compensate for this preload so that the entire weighing range is available and so that it is possible to zero and adjust (calibrate using external weights) the platform. Higher preloads may result in a reduction in the maximum weighing capacity. The following weighing capacities must not be exceeded:

– for the IS 150 IGG-H, at least 30 kg weighing capacity must remain
– for the IS 300 IGG-H, at least 60 kg weighing capacity must remain

Note to Users in the EU *:
Always set the preload prior to verification.

The components for integration into a conveyor must already be installed on the weighing platform before you connect the platform to the power supply.

*including the Signatories of the Agreement on the European Economic Area



Dimensions in millimeters

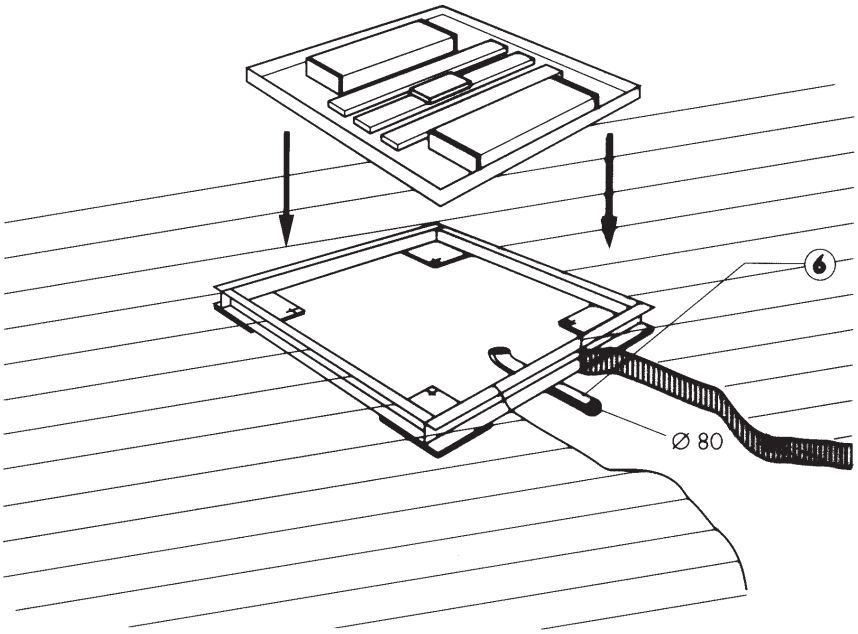
Pit Installation of the Weighing Platform

Preparation

Choose the appropriate pit frame from the list of accessories.

Note to Users in the EU*
If necessary, the weighing platform can be installed into the pit prior to initial verification. If a verified weighing platform has been installed, it must be subsequently verified in compliance with the applicable regulations of your country.

Depending on the size of your weighing platform, excavate the area where the platform is to be installed according to the diagrams on the following page. You must connect a drainage system (5) if the weighing platform will be operated in a wet area. In this case, slope the floor of the pit (8) at a minimum of 5% toward the drain point. Position a tube (6) with a min. diameter of 80 mm from a central point of the pit to the location of the display in order route the signal cable. This will protect the cable, as required.



* including the Signatories of the Agreement on the European Economic Area

Installation of a Pit Frame

– Remove the screws (7), washers and the metal plates of the pit frame
– Place tape over the threads of the pit frame
– Lower the frame into the pit
– Ensure that the contact areas of the pit frame (1), (2), (3) and (4) are completely level
– The pit frame must carry at least half the maximum weighing capacity of the platform on each side
– Adjust the height by placing thin metal plates (7) underneath the pit frame. Back fill with concrete and allow area to dry.

Positioning and Connecting the Weighing Platforms (Your Sartorius Service Technician Will Help You)

– Remove the load plate, the level indicator and leveling feet

– Take the 4 hexagon bolts, M 10x70, from the set of fasteners, YAS 04 IS, attach the locknuts to them and screw them into the threads for the leveling feet (foot screws). Tighten the bolts.

– Remove the transport locking devices as described on page 7.

– Loosely attach the 4 angular braces to the frame of the weighing platform using the screws (7) and washers from the set of fasteners.

– Push the connecting cable through the tube (6) and lower the weighing platform into the pit frame.

– Loosely attach the angular braces to the pit frame using the screws of the pit frame.

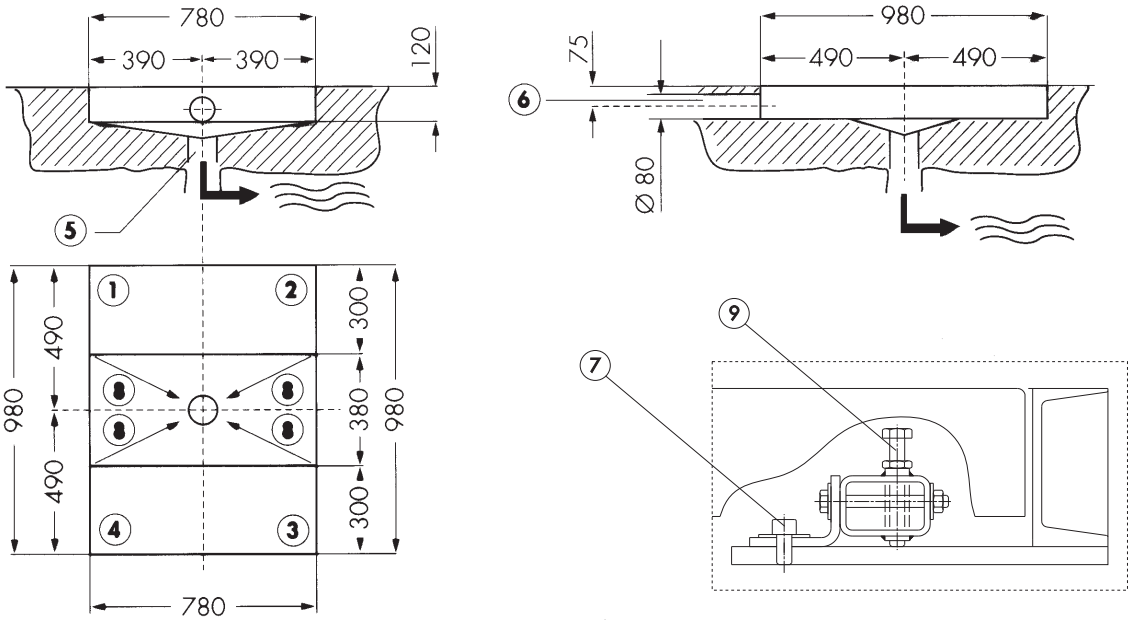
– Center the weighing platform with respect to the pit frame.

– Adjust the height of the weighing platform with the 4 hexagon bolts (9), M 10x70. Fix the screws with the locknuts and tighten the screws of the angular braces.

– Refit the load plate.

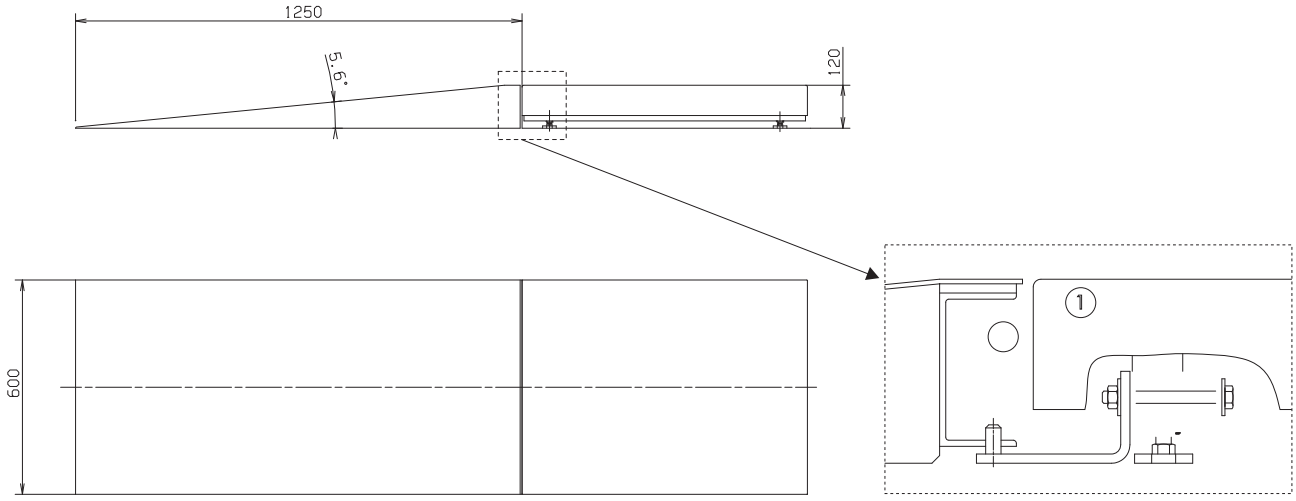
– Use the handles provided in the set of fasteners to remove the load plate.

Pit Construction Diagrams:



Installation of the Drive-on Ramp YAR 10 IS

To install the drive-on ramp, YAR 10 IS, use the angular braces and screws provided. Proceed as shown in the diagrams below.
Loosely attach the angular braces (2) onto the frame of the weighing platform using the hexagon bolts M8x80 (1), nuts and washers.
Place the side elements of the ramp on the bolts of the angular braces. Adjust the height of the weighing platform from the ramp using the leveling feet and securely tighten the fastening screws of the angular braces.



Configuring the Weighing Platform

You can adapt the weighing platform to meet your specific requirements – e.g., metrological specifications, for weighing in international weight units – and to perform optimally under various ambient conditions as well as process weighing data. For this reason, final configuration of your Sartorius Modular Technology equipment is possible only at your dealer's or your particular facilities.

You can customize the weighing platform (weighing module) via the Configuration menu using a connected display and control unit, or using a connected computer with special Sartorius configuration software (see accessories).

Options for Defining the Weighing Range Structure

SuperRange

This weighing range features exceptionally high resolution; i.e., the weighing range is subdivided into more than 50,000 digits.

SingleRange

The weighing range is subdivided into 50,000 digits maximum.

Multi-Interval

Weighing ranges with multiple levels of accuracy

The multi-interval function divides the weighing range into 3 ranges, for example. Each one has a different readability.
In the various ranges, the readability automatically adjusts when the readout for the weight on the load plate changes (see the "Specifications Chart" for the particular readability of each range).

After you have pressed the tare key, you will obtain the highest possible resolution, even when an object is on the load plate of the weighing platform.

You will find the configuration options for your weighing platform in the "Specifications Charts" on the following pages.

Specifications Charts

Access the configuration menu of the conected Sartorius terminal to set the code for the group of specifications of your choice. Please note that when you change the configuration, this may also change the preload range besides the weighing capacity and the readability. Select the appropriate ID label and affix it to the weighing platform. For direc-tions, refer to the section entitled "Selecting and Affixing the Respective ID Label." A verifiable scale consists of a weighing platform (weighing module) and a display and control unit. The scale has the type designation with isoTEST HC BF or SARTOCOWAT with HCBF : IS 150 IGG-H0CE

Weighing range structure		SuperRange		SingleRange	Multi-Interval
Weighing range		Standard	Configurable		
Maximum capacity, *Max*	kg	150	61	31	150
Readability	g	1	1	1	0 ... 30 kg 10 30 ... 60 kg 20 60 ...150 kg 50
Zero tracking ± 2%	kg	± 3	± 1.22	± 0.62	± 3
Initial zero-setting range	kg	±10	±10	±10	±10
Preload (electronic) [1])	kg	30	120	150	30
ISO test function [2])		yes	yes	yes	yes
Metrological specifications:					
Accuracy class	g	(II)	(II)	–	(III)
Verification scale interval	g	10	10	–	10/20/50
Minimum capacity, *Min,* acc. to CD[3])	g	50	50	–	200
Temperature range	°C	0 ... +40			
Select particular group of specifications (use code)**::**		***Spec. grp.1**** (10 3 1)	***Spec. grp.2*** (10 3 2)	***Spec. grp.3*** (10 3 3)	***Spec. grp.4*** (10 3 4)

Weighing range structure		SingleRange			
Weighing range		Configurable			
Maximum capacity, *Max*	kg	150	150	61	31
Readability	g	20	50	20	10
Zero tracking ± 2%	kg	± 3	± 3	±1.22	± 0.62
Initial zero-setting range	kg	±10	±10	±10	±10
Preload (electronic) [1])	kg	30	30	120	150
ISO test function [2])		yes	yes	yes	yes
Metrological specifications:					
Accuracy class		(III)	(III)	(III)	(III)
Verification scale interval	g	20	50	20	10
Minimum capacity, *Min,* acc. to CD[3])	g	400	1,000	400	200
Temperature range	°C	0 ... +40			
Select particular group of specifications (use code)**:**		***Spec.grp.5*** (10 3 6)	***Spec. grp.6*** (10 3 7)	***Spec. grp.7*** (10 3 8)	***Spec. grp.8*** (10 3 9)

[1]) With relatively high preloads, the maximum capacity is reduced by 1-kg intervals

[2]) Up to a max. preload of 120 kg

3) Council Directive 2009/23/EC on non-automatic weighing instruments used in the EU and the Signatories of the Agreement on the European Economic Area

The weighing platform has a built-in calibration weight. Should external calibration be necessary, you will need one of the following weights:

– Readability of 1 g: 50 kg, accuracy class F1

– Readability of 10 g or more: 50 kg, accuracy class M1

* factory setting

IS 300 IGG-H0CE

Weighing range structure		SuperRange		SingleRange	Multi-Interval
Weighing range		Standard	Configurable		
Maximum capacity, *Max*	kg	300	61	31	150
Readability	g	2	1	1	0 ... 30 kg 10 30 ... 60 kg 20 60 ...150 kg 50
Zero tracking ± 2%	kg	± 6	± 1.22	± 0.62	± 3
Initial zero-setting range	kg	±10	±10	±10	±10
Preload (electronic) [1])	kg	60	120	150	30
ISO test function [2])		yes	yes	yes	yes
Metrological specifications:					
Accuracy class	g	–	–	(III)	(III)
Verification scale interval	g	10	10	–	10/20/50
Minimum capacity, *Min,* acc. to CD[3])	g	50	50	–	200
Temperature range	°C	0 ... +40			
Select particular group of specifications (use code)**::**		***Spec. grp.1**** (10 3 1)	***Spec. grp.2*** (10 3 2)	***Spec. grp.3*** (10 3 3)	***Spec. grp.4*** (10 3 4)

Weighing range structure		SingleRange			
Weighing range		Configurable			
Maximum capacity, *Max*	kg	300	300	151	61
Readability	g	50	100	50	20
Zero tracking ± 2%	kg	± 6	± 6	± 3.02	± 1.22
Initial zero-setting range	kg	±10	±10	±10	±10
Preload (electronic) [1])	kg	60	60	209	299
ISO test function [2])		yes	yes	yes	yes
Metrological specifications:					
Accuracy class		(III)	(III)	(III)	(III)
Verification scale interval	g	50	100	50	20
Minimum capacity, *Min,* acc. to CD[3])	g	1,000	2,000	1,000	400
Temperature range	°C	0 ... +40			
Select particular group of specifications (use code)**::**		***Spec.grp.6*** (10 3 6)	***Spec. grp.7*** (10 3 7)	***Spec. grp.8*** (10 3 8)	***Spec. grp.9*** (10 3 9)

1) With relatively high preloads, the maximum capacity is reduced by 1-kg intervals
2) Up to a max. preload of 120 kg
3) Council Directive 2009/23/EC on non-automatic weighing instruments used in the EU and the Signatories of the Agreement on the European Economic Area

The weighing platform has a built-in calibration weight.
Should external calibration be necessary, you will need one of the following calibration weights:
– Readability of 1 g: 50 kg, accuracy class F1
– Readability of10 g or more: 50 kg, accuracy class M1

* factory setting

General Specifications

(for Use in Standard Applications Not Subject to Legal Metrology)

Model		*IS 150 IGG-H*	*IS 300 IGG-H*
Readability	g	1	2
Standard deviation	g	≤± 1	≤ ± 2
Linearity	g	≤ ± 4	≤ ± 8
Response time (average)	s	< 1.5	< 1.5
Fastest response time (constant relative accuracy)	s	≤1	≤1
Adaptation to ambient conditions and application requirements		By selection of 1 of 4 optimized filter levels	
Data output speed (depends on the filter level selected)	s	0.1 - 0.1 - 0.2 - 0.4 (normal output speed)**	
Dust and water protection rating		IP 67, dust-tight and water-proof subject to defined conditions (certified by TÜV*** in accordance with VDE 0470/EN60529)	
Suitable for use in hazardous areas		Zone 2 and 11	
Overload capacity	kg	600	
Net weight (without "*isi*" terminal) approx.	kg	70	
Power requirements (optional)		via A/C adapter, model ING2, 230 VAC or 115 VAC (to be connected by your dealer or a Sartorius service technician only)	
Frequency	Hz	48 – 63	
Power consumption (with isi10,20,30 connected to an A/C adapter, model ING2)	VA	34: maximum, 18: average	
(only weighing platform connected to an A/C adapter, model ING2)	VA	10: average	
Selectable weight units		g*, kg* , ct, oz, ozt, tlh, tlt, GN, dwt, mg, /lb, tlc, mom, K, tol, bat, MS, tons	
Automatic zero-tracking function (can be turned off by menu code)		Standard feature	
Built-in interface		RS-485 (standard, XBPI protocol): 8-bit; odd parity; transmission rates: 9,600...38,400; half-duplex optional for RS-232 (SBI protocol): 7-bit; parity: even, mark, odd, space; transmission rates: 150...19,200 baud; 1 or 2 stop bits, software /hardware handshake; factory setting: 1,200 baud; odd parity; 1 stop bit; hardware handshake with two characters after "CTS"	

* = Weight unit can also used in legal metrology

** = Menu setting "data output speed for converter" is five times faster

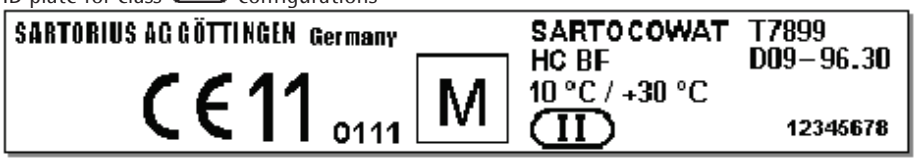
*** = The TÜV is the German Association for Technical Safety and Inspection

Selecting and Attaching ID Plates

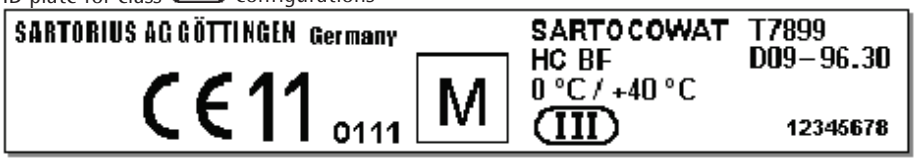
The ID plate is to be selected and attached according to the specification block (configuration of scales) and the display and control unit (terminal). For details of how to position the ID plate on the scales or tag holder, refer to the instructions in "Plates and Markings".

If display and control units (terminals) of
type **TA**, models **CAIS1, CAISL1, CAIS2, CAISL2, CAIS3, CAISL3** are being used,
EC Type Approval Certificate No. **T7899**, type **SARTOCOWAT** is applicable.

ID plate for class (II) configurations



ID plate for class (III) configurations



If display and control units (terminals) of
type **TN**, models **CIS2, CSL2, CIS3, CISL3, type TN-X, model CISX3**,
type **TN-Pro**, model **Combics Pro**,
type **isi10, isi20, isi30**, type **YAC01LA**, type **YAC01LP**, type **YAC01FC**, type **YAC02FC**,
PC with **Sartorius Win Scale** software
EC Type Approval Certificate No. **D97-09-018**, type **iso-TEST** is applicable.

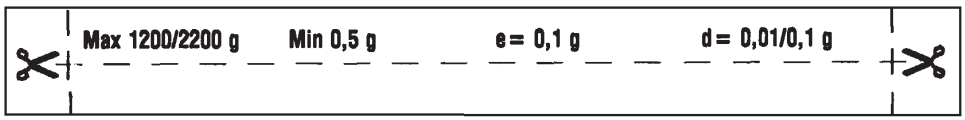
ID plate for class (II) configurations

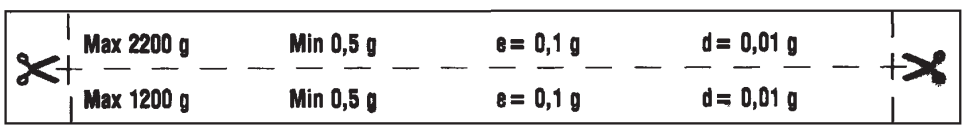
ID plate for class (III) configurations

Select and Attach Plate Containing Metrological Data

Plates with the metrological data Max, Min e and d must also be attached near to the display.
Select the plate with the Max, Min e and d metrological data that is suitable for the configuration, cut along the dotted lines and attach above the display.
The transparent protective film must be stuck over the plate containing the metrological data. The tamper-proof plate containing the metrological data does **not** need verification seals.

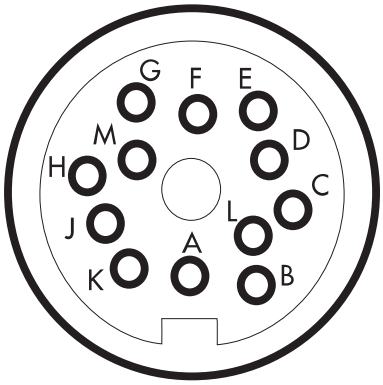
Examples of attached plates containing metrological data for the possible configurations.





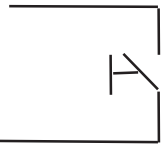
Pin Assignment Chart for the Interface RS-485

RS-485, 3-m Cable
Male Connector:
Type C091D, 12-pin round connector with threaded locking ring, Amphenol (IP67))



Pin Assignment

A	RxD-TxD-N
B	Not Connected
C	Not Connected
D	Not Connected
E	Signal GND
F	Menu Access Switch for Calibration/ Adjustment (routed externally)
G	VCC (24V Power Supply)
H	Not Connected
J	GND (24V Power Supply)
K	GND (24V Power Supply)
L	RxD-TxD-P
M	VCC (24V Power Supply)



Female Interface Connector (Recommended):
Type C091D, 12-pin, Amphenol (IP67)

Type of cable: AWG 24 specification

Be sure to follow the instructions given for connecting the weighing platform to the power supply!

Troubleshooting Guide

(For Problems That You Can Fix Yourself)

Problem	Possible Causes	Solution
No segments appear on the display	– No line current is available – The AC adapter is not plugged in – The weighing platform has been in the standby mode for more than 5 minutes	– Check the power supply – Plug the AC adapter into the platform and into an electrical outlet – Turn on the *isi* industrial terminal using the on/off switch
The weight display shows "H"	– The load exceeds the capacity of the weighing platform	– Unload the weighing platform
The weight display shows "L" or "Err 54"	– The load plate is not on the weighing platform	– Place the load plate on the platform
The weight display briefly indicates "Err 01"	– The weight unit selected requires more decimal places than are available in the display	– Select a different weight unit
The weight display briefly indicates "Err 02"	– One of the requirements for calibration/adjustment has not been met (e.g., the weighing platform is still loaded)	– Check the description of the operating menu/instruction manual and recalibrate/re-adjust the weighing platform – Unload the weighing platform
The weight display briefly indicates "Err 03"	– Calibration/adjustment was unable to be completed within a specific time	– Allow the equipment to warm up and recalibrate/re-adjust
The error code "ERR 07" is displayed	– The last function you activated probably is not allowed for weighing platforms used as legal measuring instruments (legal-for-trade)	– Refer to the operating menu to check whether this function is allowed for weighing platforms used as legal measuring instruments
The error code "ERR 08" is displayed	– The load on the weighing platform is too heavy for the platform to be zeroed	– Check the "Specifications Chart" for the configuration code you have selected
The error code "ERR 09" is displayed	– The gross weight value < zero and the weighing platform is unloaded, but you cannot tare	– Zero the weighing platform
The error code "ERR 10" is displayed	– The tare memories for your application are full, and you tried to clear the lower-level tare memory	Clear the tare memories of your application

Problem	Possible Causes	Solution
The error code "ERR 12" is displayed	– You tried to store a value in the tare memory for applications, although this memory has been blocked by menu code 2 2 x	– Check the configuration
	– You entered a numeric tare that is not allowed	– Check the value entered
The error code "ERR 17" is displayed	– Internal calibration is not possible because the preload setting is too high	– See "Setting the Preload" in the section on the operating menu
The error code "ERR 19" is displayed	– The remaining weighing capacity available is too low because the relatively high preload setting has reduced the maximum capacity	– See "Setting the Preload" in the section on the operating menu
The special code "⚠" remains displayed	– None of the keys has been pressed since the weighing platform was switched on	– Press any key
The weight readout changes constantly	– Unstable environment (ambient conditions; e.g., too much vibration or exposure to excessive drafts)	– Set up the weighing platform in a different area – Access the "Devices" setup menu to adapt the weighing platform to the particular environment
	– A foreign object is caught between the load plate and the platform frame	– Remove the foreign object
The readout of the weighing result is obviously wrong	– The weighing platform has not been calibrated/ adjusted	– Calibrate/ adjust the weighing platform
	– The weighing platform was not tared before weighing	– Tare before weighing
	– The weighing platform is tilted	– Level the weighing platform as described in the instructions

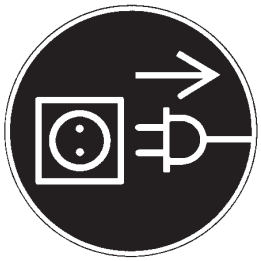
If any other errors occur, please contact your nearest Sartorius service center or your dealer.

Care and Maintenance

Servicing

Regular servicing by a Sartorius technician will extend the service life of your weighing platform and ensure its continued weighing accuracy. Sartorius can offer you service contracts, with your choice of regular maintenance intervals ranging from 1 month to 2 years.

Cleaning



Before cleaning the weighing platform, unplug it from the power supply (disconnect the AC adapter).

To clean the weighing platform when it has been exposed to dry ambient conditions:
– Use a piece of cloth wet with a commercially available cleaning agent to wipe down the weighing platform

To clean the weighing platform when it has been in a wet environment:
– Use a commercially available cleaning agent and a gentle, low-pressure jet of water to hose down the platform afterwards

The weighing platform which has been tested according to EN 60529 and found to comply with the IP67 protection standard, will remain leaktight for a maximum of 30 minutes if immersed at a maximum depth of 1 meter (approx. 3 ft.).

However, pressurized water (e.g., strong jets of water using a hose or high-pressure cleaning equipment) is **not** allowed to clean the IP67-protected weighing platform.

Never use concentrated acids, bases, solvents or pure alcohol to clean the weighing platform!

To clean the weighing platform exposed to a corrosive enviroment:
– Regularly remove all traces of corrosive substances from the platform
– Follow the manufacturer's directions provided for the particular disinfectants and cleaning agents you use to clean the weighing platform

Important Note:
If the water that you use to clean the weighing platform is too hot or cold, the difference in temperature between the water and the platform can cause condensation within the platform (according to EN 60529 on IP67 protection). This condensation may cause the weighing platform to malfunction!

Safety Inspection

If there is any indication that safe operation of the weighing platform is no longer warranted, turn off the power and disconnect it from the power supply immediately. Lock the equipment in a secure place to ensure that it cannot be used for the time being.

Safe operation of the weighing platform with the power supply is no longer ensured when
- there is visible damage to the power supply
- the power supply no longer functions properly
- the power supply has been stored for a relatively long period under conditions that are different from those specified for "Storage and Shipping"

In this case, notify your nearest Sartorius Service Center or the International Technical Support Unit based in Goettingen, Germany. Only service technicians who are authorized by Sartorius and who have access to the required service manuals are allowed to perform maintenance and repair work on the equipment.

Information on Recycling

To ensure safe shipment, your weighing platform has been packaged using environmentally friendly materials. After successful installation of the platform, you should return this packaging for recycling because it is a valuable source of secondary raw material.

For information on recycling old weighing equipment, consult your municipal waste disposal center or local recycling depot.

Translation

(1) # STATEMENT OF CONFORMITY

(2) Equipment or Protective System intended for use in potentially explosive atmospheres **- Directive 94/9/EC**

(3) Test certificate number

TÜV 01 ATEX 1739 X

(4)	Equipment or Protective System:	Weighing platform type IS...IGG-S... resp. FD...IGG-S...
(5)	Manufacturer:	Sartorius AG
(6)	Address:	Weender Landstraße 94-108 D-37075 Göttingen

(7) This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) The TÜV Hannover/Sachsen-Anhalt e.V., TÜV Certification Body N° 0032, notified body in accordance with Article 9 of the Council Directive 94/9/EC of March 23, 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential report N° 01YEX127981.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 50 021: 1999

(10) If the sign "X" is placed after the certification number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This statement of conformity certificate relates only to the design and construction of the specified equipment or protective system according to Directive 94/9/EC. Further requirements of this Directive apply to the manufacture and placing on the market of this equipment or protective system.

(12) The marking of the equipment or protective system shall include the following:

II 3 G EEx n R II T6

TÜV Hannover/Sachsen-Anhalt e.V.
TÜV CERT-Zertifizierungsstelle
Am TÜV 1
D-30519 Hannover

Head of the Certification Body

Hanover, 2001-08-15

10/014d TÜV Nord o. DAR 5.97

This statement of conformity may only be reproduced without any change, schedule included.
Excerpts or changes shall be allowed by the TÜV Hannover/Sachsen-Anhalt e.V.

(13) **SCHEDULE**

(14) **STATEMENT OF CONFORMITY N° TÜV 01 ATEX 1739 X**

(15) Description of equipment or protective system

The weighing platform type IS...IGG-S... resp. FD...IGG-S... consists of a weighing bridge with integrated measuring transducer and evaluation electronic and is intended for the use as measuring device for masses.

Combined with the control unit type ISI .. the platform forms an electronic weighing system.

The weighing platform may optionally be supplied with the power unit type ING 2/6971899 resp. ING 2/6971889.

The weighing platform type IS...IGG-S... resp. FD...IGG-S... may be operated in hazardous explosive areas that require category 3 equipment.

Electrical data

Data output and supply circuit	for the connection to the control unit type ISI ..
Supply option	for the connection to the power unit type ING 2/6971899 resp. ING 2/6971889 14,5 V d.c, 1 A, 14,5 W

(16) Test documents are listed in the test report N° 01YEX127981.

(17) Special conditions for safe use

1. The mains and all other connection cables of the weighing platform have to be secured against unintended unplugging.
2. It is not allowed to plug resp. unplug all plug- and socket connectors under load.

(18) Essential Health and Safety Requirements

no additional ones

BA 02 04.00

Translation

2nd SUPPLEMENT to

STATEMENT OF CONFORMITY No. TÜV 01 ATEX 1739 X

of the company : Sartorius AG
Weender Landstraße 94-108
D-37075 Göttingen

In the future, the weighing platform type IS...IGG-H... may also be manufactured according to the test documents listed in the test report.
The weighing platform can be powered by other equipment whose rated voltage is less than or equal to 16 VDC. This equipment may also transfer data, whereby the signal voltage may be up to +-30 VDC.
The weighing platform is additionally assessed according to the EN 50 281-1-1:1998-1+ A1.
The marking has been changed as follows:

Ex II 3 GD EEx n R II T6 T80°C

(16) Test documents are listed in the test report no. 02 YEX 186473.

(17) Special conditions for safe use

Additional:

The cable entries have to be protected against self-loosening.

(18) Essential Health and Safety Requirements

No additional ones

TÜV NORD CERT GmbH & Co. KG
TÜV CERT-Certification Body
Am TÜV 1
D-30519 Hannover
Tel.: 0511 986-1470
Fax: 0511 986-2555

Hannover, 2002-09-03

Head of the
Certification Body

BA 02.03.02

Translation

1. SUPPLEMENT to

STATEMENT OF CONFORMITY No. TÜV 01 ATEX 1739 X

of the company : Sartorius AG
Weender Landstraße 94-108
D-37075 Göttingen

In the future, the weighing platform type IS...IGG-S... bzw. FD...IGG-S... may also be manufactured according to the test documents listed in the test report. The modifications refer to the internal construction of the device and the type designation, as well.
In the future, this reads IS...IGG-H... bzw. FD...IGG-H... .

All other details and the "Special conditions for safe use" remain unchanged.

The test documents are listed in the test report no. 02YEX144061.

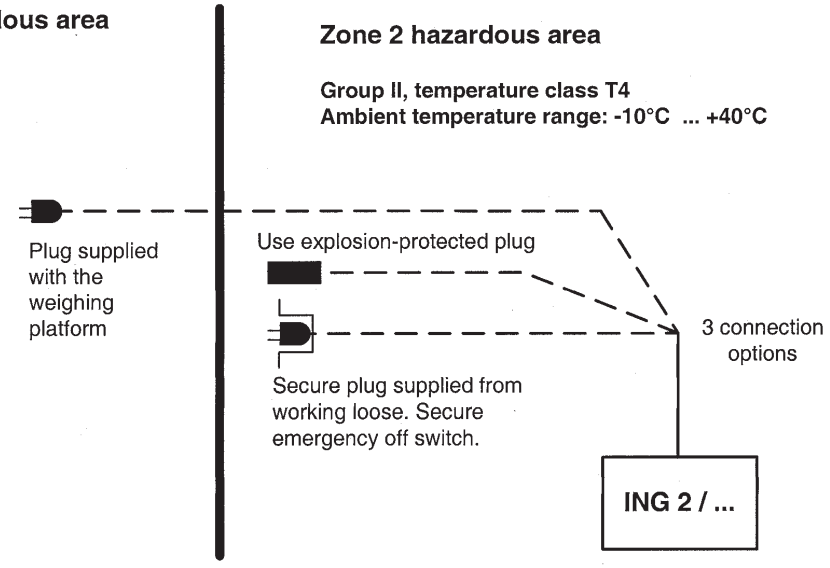
TÜV Hannover/Sachsen-Anhalt e.V.
TÜV CERT-Zertifizierungsstelle
Am TÜV 1
D-30519 Hannover

Hannover, 2002-01-23

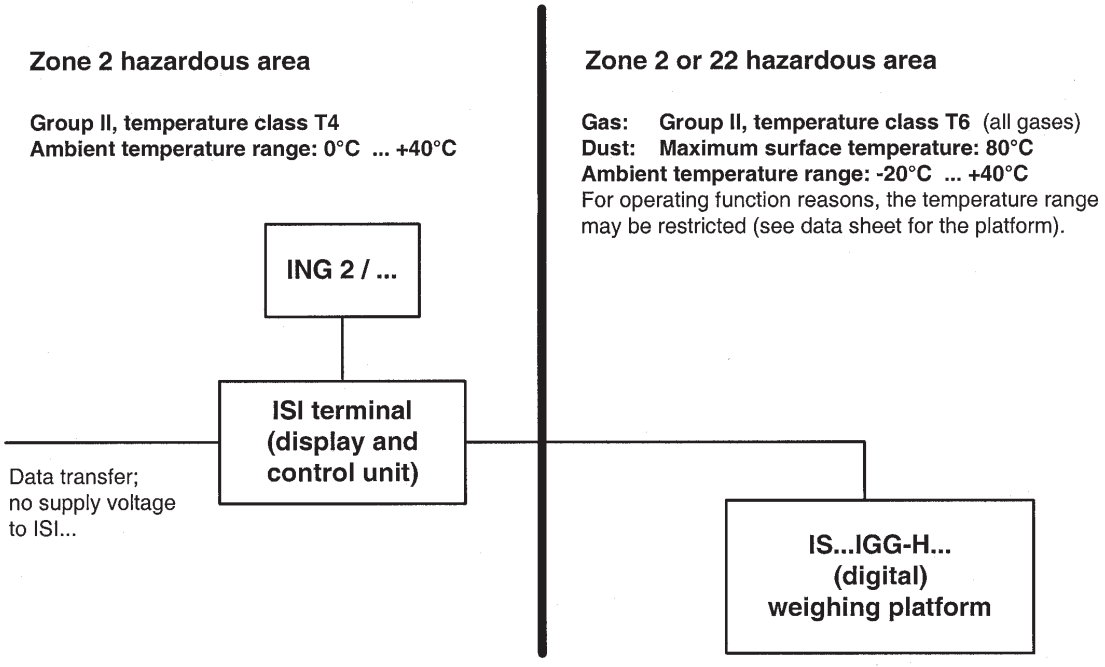
Head of the
Certification Body

BA 02 04.00

1. Connecting the (mains) cable connection

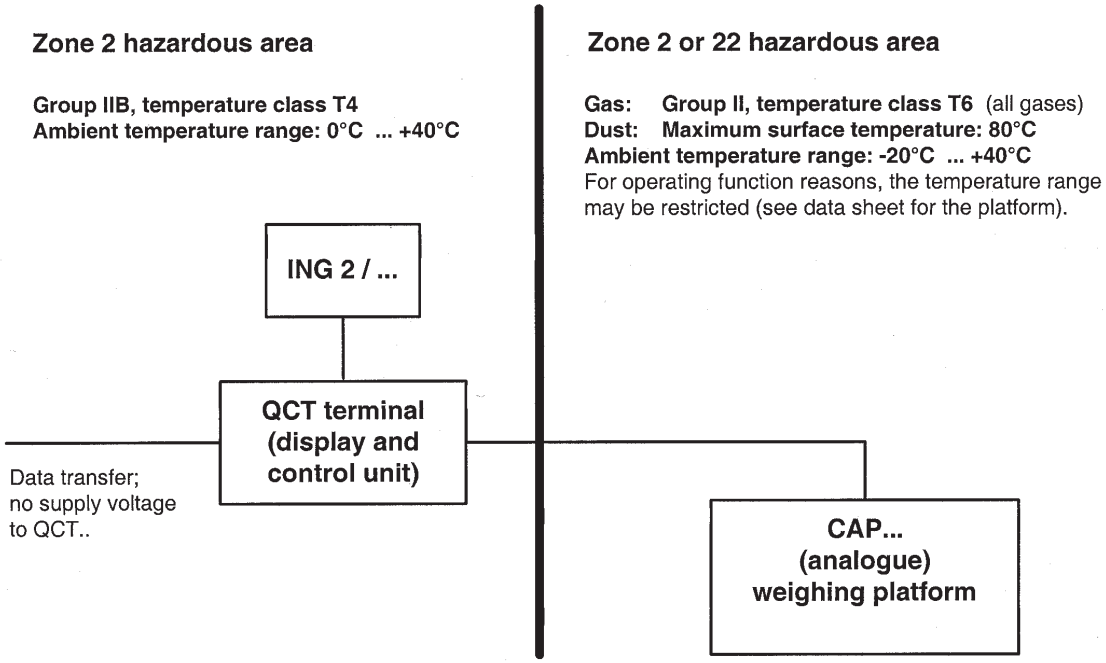

Non-hazardous area
(Safe area)
Zone 2 hazardous area
Group II, temperature class T4
Ambient temperature range: -10°C ... +40°C
Plug supplied with the weighing platform
Use explosion-protected plug
3 connection options
Secure plug supplied from working loose. Secure emergency off switch.
ING 2 / ...

2. Connection of the weighing platform to the ISI terminal (display and control unit)

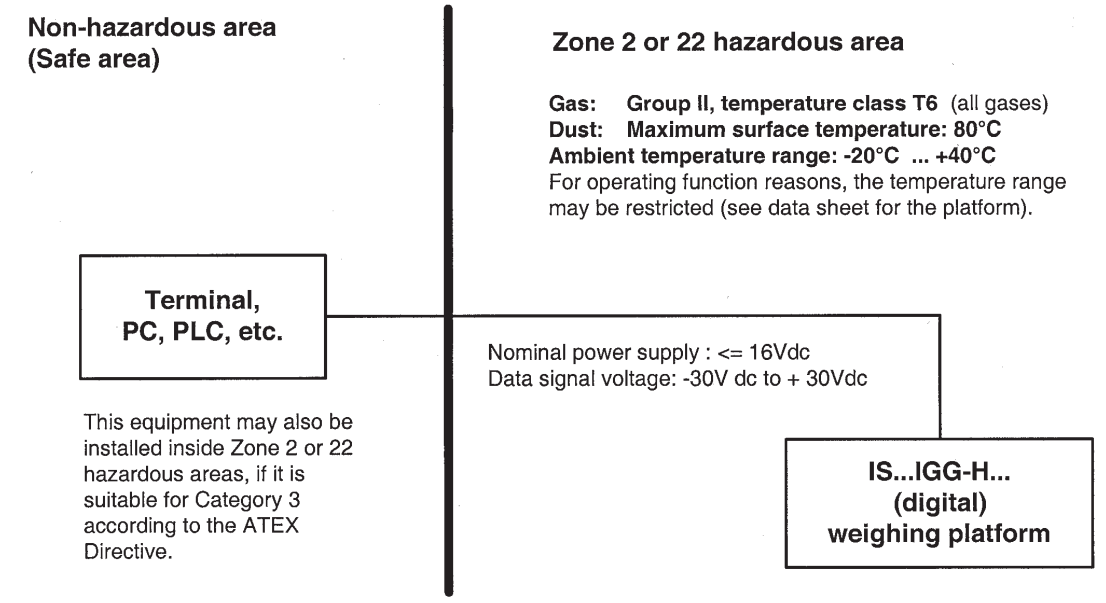

Zone 2 hazardous area
Group II, temperature class T4
Ambient temperature range: 0°C ... +40°C
Zone 2 or 22 hazardous area
Gas: Group II, temperature class T6 (all gases)
Dust: Maximum surface temperature: 80°C
Ambient temperature range: -20°C ... +40°C
For operating function reasons, the temperature range may be restricted (see data sheet for the platform).
ING 2 / ...
ISI terminal (display and control unit)
Data transfer; no supply voltage to ISI...
IS...IGG-H... (digital) weighing platform

	Date	Name		Title	Installation instructions	sartorius	
Written by	02-12-12	Klausgrete					
Reviewed by	02-12-12	Kirchhoff					
Released by	02-12-12	Klausgrete		Drawing number	35751-000-17-A4	Revision 01	Sheet 1 of 3

3. Connection of the weighing platform to the QCT terminal (display and control unit)


Zone 2 hazardous area
Group IIB, temperature class T4
Ambient temperature range: 0°C ... +40°C
Zone 2 or 22 hazardous area
Gas: Group II, temperature class T6 (all gases)
Dust: Maximum surface temperature: 80°C
Ambient temperature range: -20°C ... +40°C
For operating function reasons, the temperature range may be restricted (see data sheet for the platform).
ING 2 / ...
QCT terminal (display and control unit)
Data transfer; no supply voltage to QCT..
CAP... (analogue) weighing platform

4. Connecting the weighing platform to other equipment


Non-hazardous area (Safe area)
Zone 2 or 22 hazardous area
Gas: Group II, temperature class T6 (all gases)
Dust: Maximum surface temperature: 80°C
Ambient temperature range: -20°C ... +40°C
For operating function reasons, the temperature range may be restricted (see data sheet for the platform).
Terminal, PC, PLC, etc.
Nominal power supply : <= 16Vdc
Data signal voltage: -30V dc to + 30Vdc
This equipment may also be installed inside Zone 2 or 22 hazardous areas, if it is suitable for Category 3 according to the ATEX Directive.
IS...IGG-H... (digital) weighing platform

	Date	Name		Title	Installation instructions	sartorius	
Written by	02-12-12	Klausgrete					
Reviewed by	02-12-12	Kirchhoff					
Released by	02-12-12	Klausgrete		Drawing number	35751-000-17-A4	Revision 01	Sheet 2 of 3

Marking / Certificate No.:

ING 2/...	⟨Ex⟩ II 3 G	EEx nC	II	T4			SEE 01 ATEX 3142 X
ISI ...	⟨Ex⟩ II 3 G	EEx nA/C	II	T5			SEE 01 ATEX 3143 X
QCT..	⟨Ex⟩ II 3 G	Ex nAC	IIB	T4			TÜV 99 ATEX 1412 X
IS...IGG-H	⟨Ex⟩ II 3 GD	EEx nR	II	T6	T80°C	IP65	TÜV 01 ATEX 1739 X
CAP..	⟨Ex⟩ II 3 GD	EEx nA	II	T6	T80°C	IP65	TÜV 02 ATEX 1884

Temperature range / Output parameter:

ING 2/...	-10°C ... +40°C	14,5Vdc / 1A / 14,5VA
ISI ...	0°C ... +40°C	---
QCT..	0°C ... +40°C	---
IS...IGG-H	-20°C ... +40°C (*)	---
CAP..	-20°C ... +40°C (*)	---

*: For operating function reasons, the temperature range may be restricted (see data sheet for the platform).

Instructions:

1) Install the equipment in compliance with applicable laws, rules and regulations, ordinances and standards. In particular, be sure to conform to the European Standar ds EN 60079-14 (Electrical apparatus for explosive atmospheres) and EN 50281-1-2 (Electrical apparatus for use in the presence of combustible dust).
2) Be sure to follow the installation, operating, maintenance and servicing instructions giv en in the manual supplied with the weighing platform.
3) Cable connections must be secured so that they do not work loose.
4) The housing of equipment connected to power may only be opened outside the hazardous area.
5) All metallic parts (housing, column, load plate, drive-on ramp, bench, etc.) must be electrically connected to the terminal for the equipotential bonding conductor so that any electrostatic charges can be conducted away from the equipment.
6) Avoid generating static electricity. Use only a damp cloth to wipe down the weighing platform and other connected equipment.
7) If you wish to use other manufacturer's equipment in a Zone 2 hazardous area, be sure that it has the required group and temperature class; to use such equipment in Zone 22, make sure that this equipment has the maximum surface temperature specified.

	Date	Name		Title	Installation instructions	sartorius	
Written by	02-12-12	Klausgrete	⟨Ex⟩				
Reviewed by	02-12-12	Kirchhoff		Drawing number	35751-000-17-A4	Revision 01	Sheet 3 of 3
Released by	02-12-12	Klausgrete					

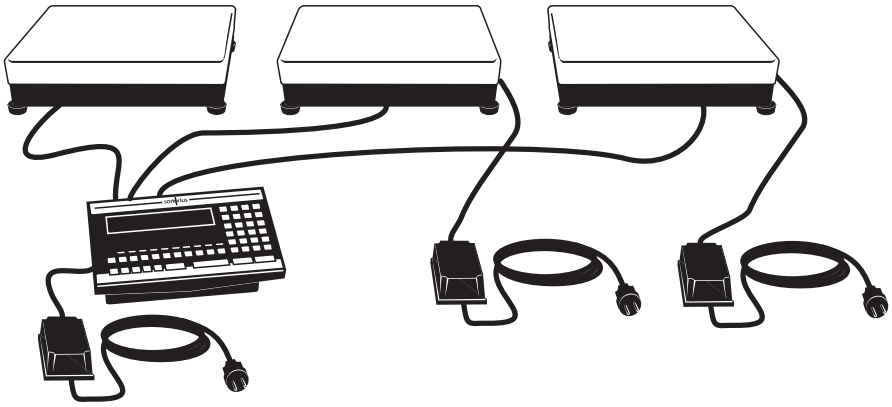
*Use of the Weighing Platform as a Legal Measuring Instrument in the EU**

Components of a Legal Weighing

The weighing platform is a modular device. This modular device is only considered to be a verified scale once it has been connected to a suitable display and control unit, and initial verification has taken place (a deviating configuration may also be defined for the initial verification by Sartorius).

Therefore, a legal weighing instrument can consist of the following:

– a Sartorius *isi* industrial terminal + 1 to 3 IS weighing platforms



or

– a Sartorius *isi* industrial terminal + at least 1 weighing platform + up to 2 further EC- or nationally type-approved weighing instruments

As a weighing instrument, the weighing platform is not allowed to be used for weighing goods intended for direct sale to the public. Since the platform's type-approval certifcate for verification applies to non-automatic weighing instruments only, you must comply with your country's national regulations that apply to the place of installation of your weighing instrument for automatic operation with or without supplementary devices installed.

*including the Signatories of the Agreement on the European Economic Area

Effect of the Preload on the Acceptability for Verification in the EU*

Only internal adjustment (calibration) is allowed for weighing instruments verified as legal measuring instruments (refer to the operating instructions for the particular *isi* industrial terminal you are using). Therefore, if you use your weighing platform in a configuration for which you cannot use the ISO test on account of the relatively high preload, the platform is not acceptable for verification.

To have your weighing platform verified, you must change the preload setting before verification only.

The legal basis permitting Sartorius to perform initial verification is constituted by the following: 1) EC Council Directive No. 2009/23/EC on non-automatic weighing instruments, which has been applicable within the harmonized Internal Market of the European Union since 1 January 1993; and 2) the certificate issued by the Metrology Department "Eichwesen" of the Landesverwaltungsamt of Lower Saxony in Germany.
(MEN, Mess- and Eichwesen Niedersachsen)

Before verification, the respective ID labels and metrology sticker must be affixed to the area on the instrument(s) as provided.

* including the Signatories of the Agreement on the European Economic Area

Approved Auxiliary Measuring Devices

When using the weighing platform as a legal measuring instrument in the EU, you may connect to it only auxiliary measuring devices that have been approved for legal metrology in accordance with the EC Type-Approval Certificate No. D95-09-006:

– Electromechanical weighing instruments verified for legal metrology
– Hand or foot switches for activating the tare function and/or print function
– T-connector — Model YTC01, Sartorius
– Interface converters — Model Series 7253, YCC 01- and YCO...,Sartorius
– Digital remote displays — Models YRD12Z and YRD13Z, Sartorius
– Printers — Models YDP02-0D,YDP02-0CE, Sartorius
– Industrial terminals of the *isi* series, used as display and control devices
– Checkweighing display with color-coded indicators — Model YRD 10Z, Sartorius (does not display weights or other measured values)
– Bar code scanners
– Other printers and/or auxiliary measuring devices that are stated on an EC Type-Approval Certificate for a Sartorius non-automatic weighing instrument, or other printers and devices whose suitability for connection to weighing instruments is confirmed by independently issued certificates or reports provided by a Notified Body in the EU and the Signatories of the Agreement on the European Economic Area.

For applications not subject to the regulations of legal metrology, any type of auxiliary device can be connected to the weighing platform:
– D/A converter — Model YDA01Z, Sartorius
– Additional printer, card reader, bar code scanner, remote display, modem, PC device for data transfer to a central computer, or a similar device.

Information Concerning the EC Machinery Directive

Sartorius balances, scales and weighing platforms are not machines in the sense of the EC Machinery Directive; however, as individual instruments they meet the safety requirements of this Directive.

If Sartorius balances, scales and weighing platforms are installed in conveyor systems, supplemented by auxiliary devices or equipment or otherwise modified, responsibility for compliance with the EC Machinery Directive and other safety requirements shall rest with the person who is responsible for the conveyor system, equipment added and/or modification.

Physikalisch-Technische Bundesanstalt

Braunschweig und Berlin

PTB

EG-Bauartzulassung

EC type-approval certificate

Zulassungsinhaber: *Issued to:*	Sartorius AG Weender Landstr. 94-108 37075 Göttingen
Rechtsbezug: *In accordance with:*	§ 13 des Gesetzes über das Mess- und Eichwesen *(verification act)* vom*/dated* 23. März 1992 (BGBl. I S. 711), zuletzt geändert am *(last amended on)* 02.02.2007 (BGBl. I S. 58), in Verbindung mit Richtlinie *(in connection with council directive)* 90/384/EWG, geändert durch *(amended by)* 93/68/EWG
Bauart: *In respect of:*	Nichtselbsttätige elektromechanische Waage mit oder ohne Hebelwerk *Nonautomatic electromechanical weighing instrument with or without leverwork*
Typ / *Type*:	iso-TEST
	Genauigkeitsklasse/*class* (I), (II), (III), (IIII) Max 2,1 g ... 300 t Option: Mehrteilungswaage, Mehrbereichswaage *Multi-interval instrument, multiple range instrument*
Zulassungsnummer: *Approval number:*	**D97-09-018 7. Revision**
Gültig bis: *Valid until:*	26.06.2017
Anzahl der Seiten: *Number of pages:*	18
Geschäftszeichen: *Reference No.:*	PTB-1.12-4030179
Benannte Stelle: *Notified Body:*	0102

Im Auftrag
By order

Marcus Link

PHYSIKALISCH-TECHNISCHE BUNDESANSTALT 40

Braunschweig, 29.06.2007

Siegel
Seal

Die Hauptmerkmale, Zulassungsbedingungen und Auflagen sind in der Anlage enthalten, die Bestandteil der Revision der EG-Bauartzulassung ist. Hinweise und eine Rechtsbehelfsbelehrung befinden sich auf der ersten Seite der Anlage

The principal characteristics, approval conditions and special conditions, if any, are set out in the Annex which forms an integral part of this Revision of the EC type-approval certificate. For notes and information on legal remedies, see first page of the Annex.

R3-0023

Physikalisch-Technische Bundesanstalt

Braunschweig und Berlin

PTB

Prüfschein

Test certificate

Ausgestellt für: *Issued to:*	Sartorius AG Weender Landstraße 94 – 108 37075 Göttingen Bundesrepublik Deutschland
Prüfgrundlage: *In accordance with:*	EN 45501 (1992), Nr.8.1, OIML R 76-1 (1992)
Gegenstand: *Object:*	Lastaufnehmer mit Wägezelle und Auswerteelektronik mit digitalem Ausgang als Modul einer elektromechanischen Waage zum Anschluß an geeignete Anzeige- und Bedienterminals *Load receptor with load cell and electronic device with digital output as module of an electromechanical weighing instrument for connection to suitable display- and operator-terminals* Typ / *type* **BA BF, BC BF, BD BF, BF BF, HC BF, MA BF und MD BF**
Kennummer: *Serial number:*	---
Prüfscheinnummer: *Test certificate number:*	D09-96.30 7. Revision / *Revision 7*
Datum der Prüfung: *Date of Test:*	
Anzahl der Seiten: *Number of pages:*	12
Geschäftszeichen: *Reference No.:*	1.14 – 02001430
Benannte Stelle: *Notified Body:*	0102

Im Auftrag
By order

Link

PHYSIKALISCH-TECHNISCHE BUNDESANSTALT 40

Braunschweig, 2002-11-13

Siegel
Seal

392 00 e-rb

Hinweise siehe erste Seite der Anlage, die Bestandteil des Prüfscheines ist.
For notes, see first page of the Annex which forms an integral part of the test certificate.

Declarations of Conformity

The CE Mark on Sartorius Equipment

In 1985, the Council of the European Community approved a resolution concerning a new approach to the technical harmonization and standardization of national regulations. The organization for monitoring compliance with the directives and standards concerning CE marking is governed in the individual EU Member States through the implementation of the EC Directives adopted by the respective national laws. As of December 1993, the scope of validity for all EC Directives has been extended to the Member States of the European Union and the Signatories of the Agreement on the European Economic Area.

Sartorius complies with the EC Directives and European Standards in order to supply its customers with weighing instruments that feature the latest advanced technology and provide many years of trouble-free service.

The CE mark may be affixed only to weighing instruments and associated equipment that comply with the applicable Directive(s):

Electromagnetic Compatibility

The equipment meets the requirements of the following Directive:

Council Directive 89/336/EEC "Electromagnetic Compatibility (EMC)"

This Directive regulates the use of equipment that can cause electromagnetic interference or whose functioning can be influenced by such interference.

Applicable European Standards:

Limitation: of emissions	EN 50081-1	Residential, commercial and light industry
	EN 50081-2	Industrial environment
Defined immunity to interference	EN 50082-1	Residential, commercial and light industry
	EN 50082-2	Industrial environment

Important Note:
The operator shall be responsible for any modifications to Sartorius equipment and for any connections of equipment not supplied by Sartorius and must check and, if necessary, correct these modifications and connections. On request, Sartorius will provide information on the minimum operating specifications (in accordance with the Standards listed above for defined immunity to interference).

Additional Directive for Weighing Instruments Used in Legal Metrology: Council Directive 90/384/EEC "Non-Automatic Weighing Instruments"

This Directive regulates mass determination in legal metrological applications, e.g., in
– the manufacture of pharmaceuticals
– medicine and health care
– calculation of fees
– price calculation

For the respective Declaration of Type Conformity for weighing instruments that have been verified by Sartorius for use as legal measuring instruments and that have an EC Type-Approval Certificate, see page 37.

This Directive also regulates the performance of the EC verification by the manufacturer, provided that an EC Type-Approval Certificate has been issued and the manufacturer has been accredited by an officer of a Notified Body registered at the Commission of the European Community for performing such verification. On February 15, 1993, Sartorius was certified for performing verification.

For information on the CE mark on Sartorius equipment and legal regulations currently applicable in your country, and to obtain the names of the persons to contact, pease ask your local Sartorius office, dealer or service center.

CE Declaration of Type Conformity to Directive No. 2009/23/EC

This declaration is valid for non-automatic electromechanical weighing instruments for use in legal metrology. These weighing instruments accepted for legal metrological verification have an EC Type-Approval Certificate. The model(s) concerned is (are) listed below along with the respective type, accuracy class, and EC Type-Approval Certificate number:

Model	Weighing instrument type	Accuracy Class	EC Type Approval No.	In Conjunction with Test Certificates				
				Type			Certificate No.	
IS.....-.0CE*	iso-TEST	(II) oder (III)	D97-09-018	HA BD BD BF BF BF HC BF			D09-95.18 D09-96.30 D09-96.30 D09-96.30	
IS.....-.XCE*	iso-TEST	(II) oder (III)	D97-09-018	BD BF BF BF HC BF			D09-96.30 D09-96.30 D09-96.30	
IS.....-.0CE**	SARTOCOWAT	(II) oder (III)	T7899	HA BD BD BF BF BF HC BF	+ TA		D09-95.18 D09-96.30 D09-96.30 D09-96.30	+ D09-11.02
IS.....-.XCE**	SARTOCOWAT	(II) oder (III)	T7899	BD BF BF BF HC BF	+ TA		D09-96.30 D09-96.30 D09-96.30	+ D09-11.02

*) when connected to indicating and operator terminal isi10, isi20, isi30, TN (CIS2. CISL2, CIS3, CISL3), TN-X (CIXS3), TN-Pro (CISPRO), YAC01LA, YAC01LP, YAC01FC, YAC02FC or computer (CE) and software Sartorius Win Scale (D09-99.15)

**) when connected to indicating and operator terminal TA (CAIS1, CAISL1, CAIS2, CAISL2, CAIS3, CAISL3)

SARTORIUS AG declares that its weighing instrument types comply with the requirements of the Council Directive on non-automatic weighing instruments, no. 2009/23/EC of 23 April 2009; the associated European Standard "Metrological aspects of non-automatic weighing instruments," No. EN 45501; the most recently amended versions of the national laws and decrees concerning legal metrology and verification in the Member States of the European Union, the EU, and the Signatories of the Agreement on the European Economic Area, which have adopted this Council Directive into their national laws; and with the requirements stipulated on the Type-Approval Certificate for verification.
This Declaration of Type Conformity is valid only if the ID label on the weighing instrument has the CE mark of conformity and the green metrology sticker with the letter "M" stamped on it (the two-digit number in large print stands for the year in which the mark was affixed):

Example (date/year and number of the notified body may vary):

CE 11 0111 M

If these marks are not on the ID label, this Declaration of Type Conformity is not valid. Validity can be obtained, for example, by submitting the weighing instrument for final processing by an authorized representative of SARTORIUS AG. The period of validity of this Declaration of Type Conformity shall expire upon any tampering with, repair or modification of this weighing instrument or, in some Member States, on the date of expiration. This declaration applies only to the weighing instrument without peripheral devices.
The operator of this weighing instrument shall be responsible for obtaining an authorized renewal of the verification, such as subsequent or periodic verification, of the weighing instrument for use as a legal measuring instrument.

Sartorius AG
37070 Goettingen, Germany
Signed in Goettingen on 03 May 2011

i. V. P. Baumfalk

Dr. Reinhard Baumfalk
(Vice President R&D)

i. V. J. Rehwald

J. Rehwald
(Head of the Production Department
Mechatronics / Weighing Technology Division)

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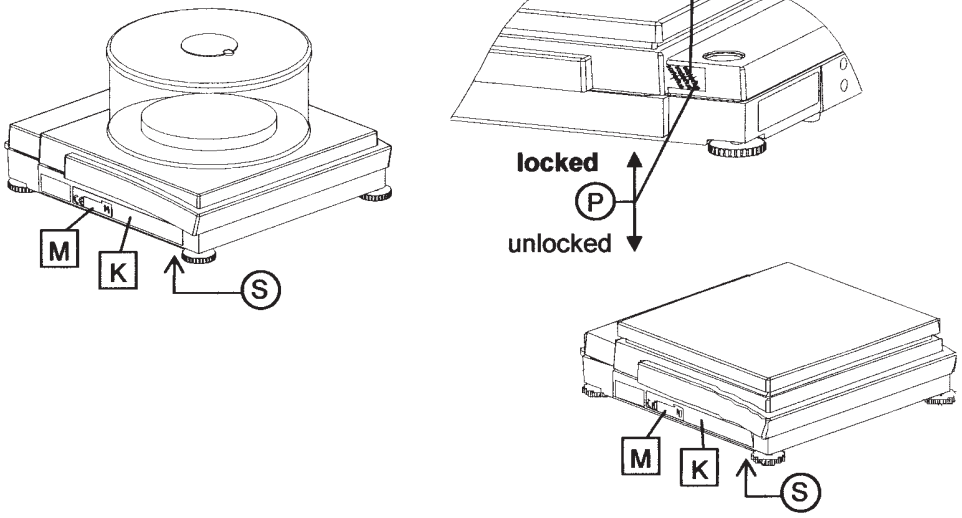
P106ed03.doc

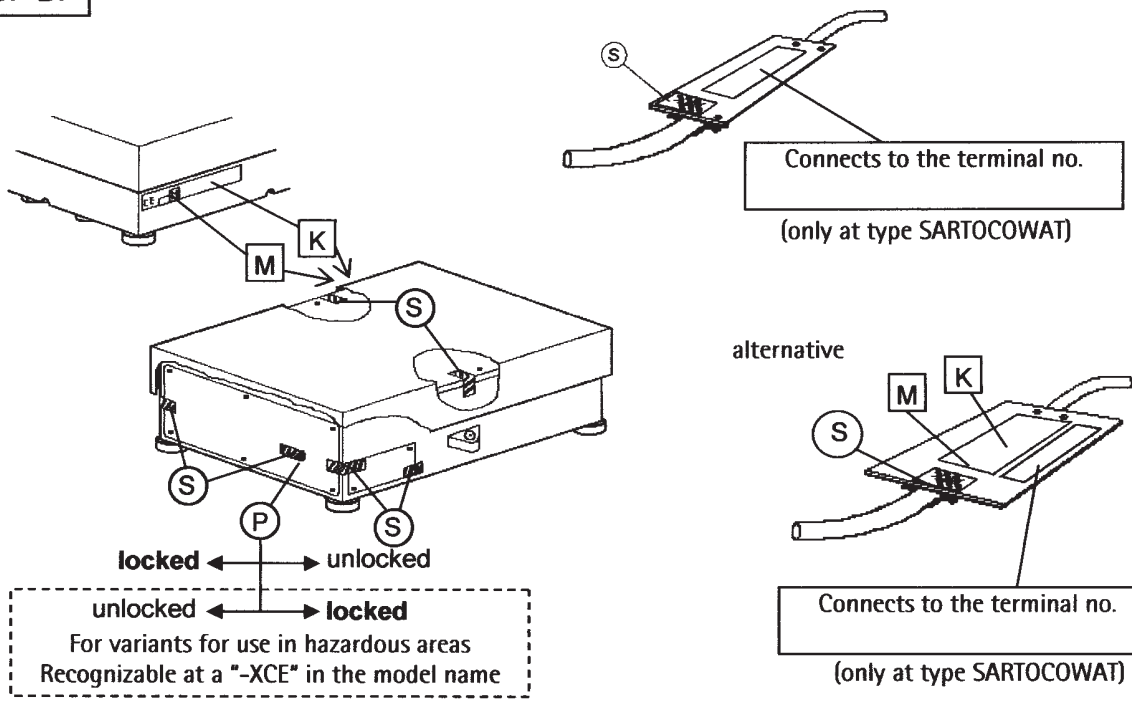
Plates and Markings – IS... -.CE + Terminals

Note: Protective seals of the indicating and operator terminal see belonging manuals.

Type BD BF

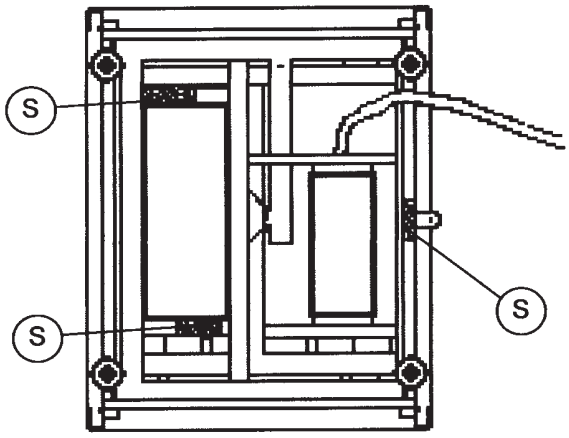


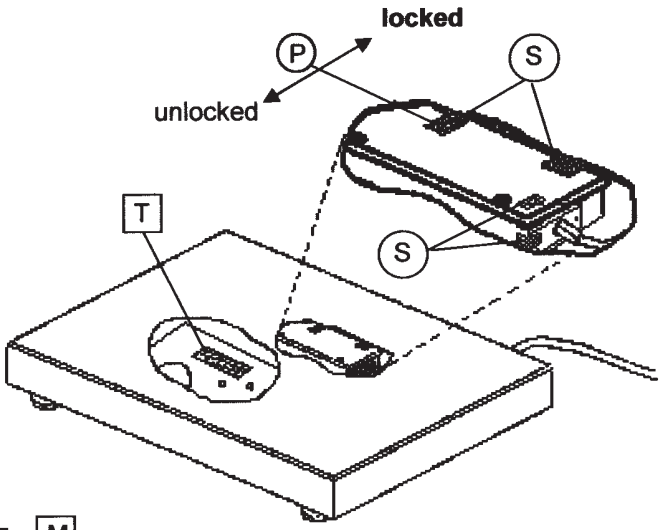
Type BF BF

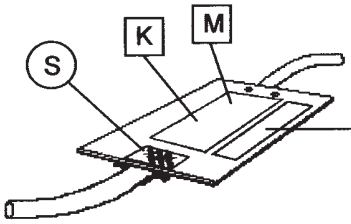


Type of weighing instrument: iso-TEST Types of weighing modules: BD BF, BF BF, HA BD, HC BF
EC Type-approval D97-09-018 + Test certificates D09-96.30, D09-95.18
or
Type of weighing instrument: SARTOCOWAT Types of weighing modules: BD BF, BF BF, HA BD, HC BF
PPIS030511e EC Type-approval T7899 + Test certificates D09-96.30, D09-95.18

Type HA BD







Connects to the terminal no.

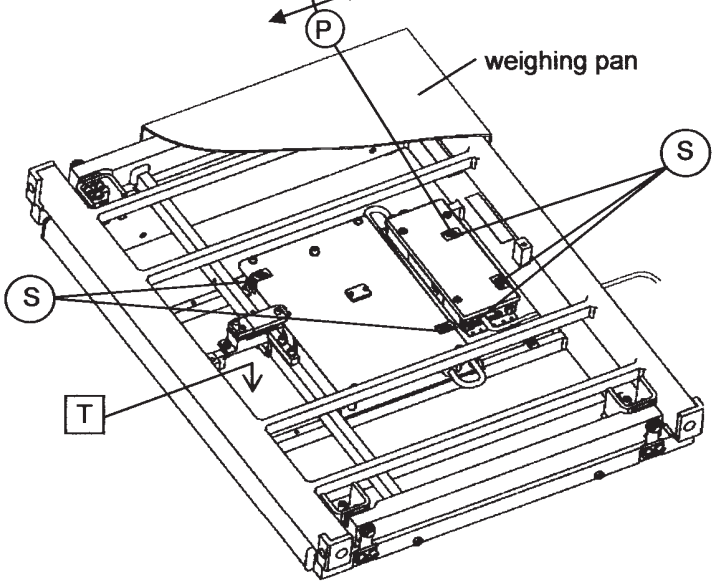
(only at type SARTOCOWAT)

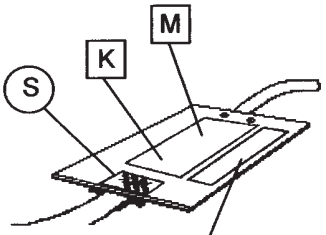
Type HC BF

For variants for use in hazardous areas
Recognizable at a "-XCE" in the model name

locked ◄——► unlocked

locked





Connects to the terminal no.

(only at type SARTOCOWAT)

K Descriptive plate with CE-conformity mark

M Mark for EC verification (green metrology sticker)

S Protective seal

T Plate with model designation

P Menu access switch

Type of weighing instrument: iso-TEST Types of weighing modules: BD BF, BF BF, HA BD, HC BF
EC Type-approval D97-09-018 + Test certificates D09-96.30, D09-95.18
or
Type of weighing instrument: SARTOCOWAT Types of weighing modules: BD BF, BF BF, HA BD, HC BF
EC Type-approval T7899 + Test certificates D09-96.30, D09-95.18

PPIS030511e

In connection with terminals types isi10, isi20, isi30, TN (CIS2, CISL2, CIS3, CISL3), TN-X (CIXS3), TN-Pro (CISPRO), YAC01LA, YAC01LP, YAC01FC, YAC02FC or computer (CE) and software Sartorius Win Scale (D09-99.15)

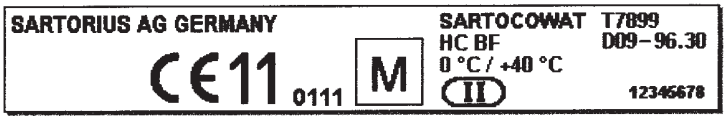
Example of descriptive plate of the already verified weighing instrument [K]

Example of plate with model designation - weighing module [T]

Example of plate with model designation – terminal [T]

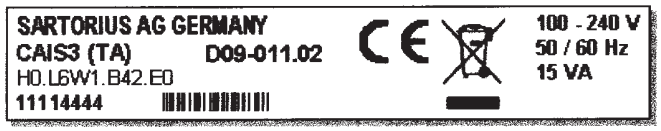
In connection with terminal type TA (CAIS1, CAISL1, CAIS2, CAISL2, CAIS3, CAISL3)

Example of descriptive plate of the already verified weighing instrument [K]



Example of plate with model designation - weighing module [T]

Example of plate with model designation – terminal [T]



Type of weighing instrument: iso-TEST Types of weighing modules: BD BF, BF BF, HA BD, HC BF
EC Type-approval D97-09-018 + Test certificates D09-96.30, D09-95.18
or
Type of weighing instrument: SARTOCOWAT Types of weighing modules: BD BF, BF BF, HA BD, HC BF
EC Type-approval T7899 + Test certificates D09-96.30, D09-95.18

"EC Verification" - A Service Offered by Sartorius

Our service technicians authorized to perform the verifcation* of your weighing instruments which are acceptable for legal metrological verification can inspect and verify the metrological specifications at the place of installation within the Member States of the European Union and the Signatories of the European Economic Area.

"New Installation" Service
Initial verification is covered in our "New Installation" service package. In addition to initial verification, this package provides you with a series of important services which will guarantee you optimal results in working with your weighing instrument:
– Installation
– Startup
– Inspection
– Training
– Initial verification

If you would like Sartorius to perform initial verification of your weighing instrument, contact an authorized service representative. Please refer to the Sartorius European Service Center Addresses on page 39.

Subsequent Verifications within the European Countries

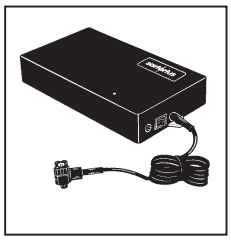
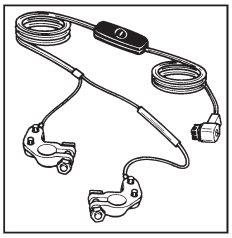
The validity of the verification will become void in accordance with the national regulations of the country in which the weighing instrument is used. For information on verification and legal regulations currently applicable in your country, and to obtain the names of the persons to contact, please contact your local Sartorius office, dealer or service center as indicated on the following page.

* in accordance with the accreditation certificate issued to Sartorius

Accessories (Options)

	Order No.:
Data interface port with 3-m cable (IP67, RS-485) and 12-pin round connector	YDO50IS
Data interface port with 3-m cable (IP67, RS-485) and 12-pin round connector electrically isolated	YDO51IS
Data interface port with 3-m cable (IP67, RS-232C/RS-423) and 12-pin round connector	YDO52IS
Data interface port with 6-m cable (IP67, RS-485) and 12-pin round connector (part of the standard equipment supplied))	YDO53IS
Extension cable to connect an *isi* terminal to a weighing platform; 12-pin round connector to 12-contact round connector (IP65, 6 m)	YCC 01-ISM6
Round female connector, IP65, type C091D, 12-contact, Amphenol	69 QC0011
Round male connector, IP65, type C091D, 12-pin, Amphenol	69 QC0010
Adapter cable, from round connector to PC, 25-pin D-Submini, 0.2 m long (YDO52IS required)	YCC 01-0017D2

For ordering customized cables and accessories, contact your local Sartorius office or dealer.

	PC adapter cable, 25-pin D-Submini – 9-contact D-Submini 0.25 m long (YDO 52 IS and YCC 01-0017D2 required)	6965619
	Special menu access locking device, IP65 (for legal metrology); for external positioning of the menu access lock on weighing platforms built into systems. If this device is used, a tag plate for ID labels is not required.	YAS 02 IS
	Upgrade kit for DC power supply to the weighing platform (without using an external AC adapter or power supply; the AC adapter does not come standard with this accessory) IP67 cable gland (to be installed by an authorized service technician only)	YAS 03 IS
	External rechargeable battery pack; hours of operation approx. 28 (YAS03IS required)	YRB 06 Z
	IP65 AC adapter, 3-m primary cable, 1.5-m secondary cable; to be installed by an authorized service technician only (YAS03IS required) for 220 V for 110 V	 6971899 6971500
	Adapter cable for connecting the weighing platform to a 12-V car battery or to a separate 12-V power source using the terminal leads; cable length: 3.7 m (~ 12 ft.); with integrated switch and fuse, reverse battery polarity protection; to be installed, using the YAS03IS, by an authorized service technician only	YRB 01 IS

Roller conveyor, with 8 rollers (for the 800 x 600mm IS weighing platform)	
Aluminum	YRC01IGP
Stainless steel	YRC01IGS
Drive-on ramp (1,250 x 600 mm)	YAR 10 IS
Pit frames	
– Stainless steel	YEG 01 IP
– Painted	YEG 04 IP
Set of fasteners for pit frame installation	YAS 04 IS

For ordering customized cables and accessories, contact your local Sartorius office or dealer.

EC type-approval certificate

Number **T7899** revision 0
Project number 10200901

Issued by	NMi Certin B.V. Hugo de Grootplein 1 3314 EG Dordrecht The Netherlands
In accordance with	The Council Directive 2009/23/EC on non-automatic weighing instruments.
Manufacturer	Sartorius AG Weender Landstrasse 94 - 108 37075 Goettingen Germany
In respect of	A class (I), (II) or (III), electronic, **non-automatic weighing instrument.** Manufacturer mark/name: Sartorius Type : SARTOCOWAT
Characteristics	n ≤ the number of verification scale intervals mentioned in the test certificates of the weighing modules. In the description number T7899 revision 0 further characteristics are described.
Valid until	29 March 2021
Description and documentation	The instrument is described in the description number T7899 revision 0 and documented in the test certificates involved.

The Notified Body no. 0122
NMi Certin, 29 March 2011

C. Oosterman
Head Certification Board

Sartorius Weighing Technology GmbH
Weender Landstraße 94-108
37075 Goettingen, Germany

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